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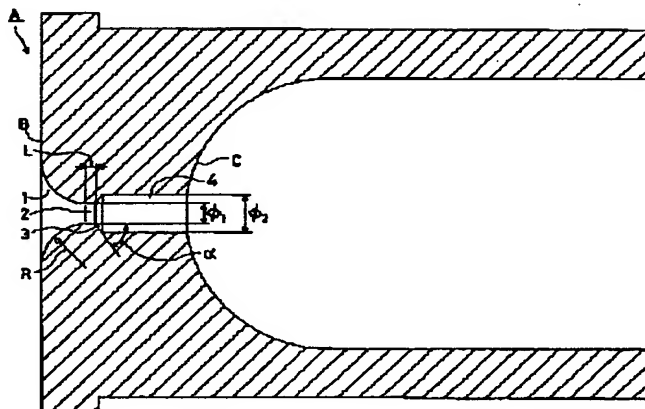
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APPLICANT : FUJIKIN INC;

INVENTOR : YAMAJI MICHIO;

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TITLE : ORIFICE FOR PRESSURE TYPE FLOW
CONTROL DEVICE AND
MANUFACTURE THEREOF



ABSTRACT : PROBLEM TO BE SOLVED: To attain pressure flow control of high accuracy by providing an inlet tapered part, a short throttle parallel part, a short tapered part and a parallel diameter-enlarged part continuously in this order.

SOLUTION: An orifice for a pressure type flow control device is composed of an orifice A, an inlet tapered part 1, a throttle parallel part 2, a tapered diameter-enlarged part 3 and a parallel diameter-enlarged part 4. As a concrete example, it is confirmed that linearity between a flow rate and primary pressure P_1 is ensured over a range of the flow characteristic P_2/P_1 of the orifice (a parallel diameter-enlarged part inner diameter ($\phi_2=0.2$ mm) A being $P_2/P_1=0.633$ ($P_1=3.0$ kgf/cm² abs, $P_2=1.89$ kgf/cm² abs), that is, in spite of a form of the orifice A based on machining of only deburring by an R-cutting tool, a drill and a center drill, the linear characteristic of any orifice A is held to a point of $P_2/P_1=0.633$ so as to attain flow control of high accuracy.

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